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Compartment Syndrome

Sir,

We read with interest the case report of Reddy *et al*.[1] This highlights arm compartment syndrome due to puncture of an arterio-venous fistula in a patient who was subsequently found to be excessively heparinised. We would like to emphasise three points that relate to forearm compartment syndrome. Firstly the important symptoms for diagnosing compartment syndrome are pain (especially out of proportion to the injury) and paraesthesia.[2] The paraesthesia is especially important in these patients, as loss of two-point discrimination occurs early and is an extremely sensitive sign for diagnosing the condition. The authors have described paraesthesia but the character and method of assessment has not been defined.

The second point to note is that a clinical diagnosis of compartment syndrome was made in this patient because of the classical clinical symptoms and in these patients there is no need for intra-compartmental pressure measurement. The good result obtained in this case was likely to be due to undergoing decompression within 12 h but this has also not been mentioned. The final point to note is the risk of compartment syndrome as a hazard of puncture of any blood vessel in any anticoagulated patient. It is these patients in whom pain in the arm following such a procedure should not, necessarily, be to be blamed on the trauma caused by the actual puncture but may also be caused due to intra-compartmental bleeding.

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Carotid Endarterectomy

Sir,

This article by Wijeyaratne *et al*.[1] discusses a sound technique for the removal of intact carotid endarterectomy specimens and makes clear the implications for research and quality control.

The authors state that the method is particularly useful in those not requiring a shunt and that in those that require shunting the shunt may be inserted after plaque removal, which takes 2–3 min. However, in our experience the endarterectomy procedure may take a longer than 3 min. Careful dissection is needed for all plaques if suitable specimens are to be obtained and some plaques may require prolonged dissection to ensure a smooth luminal surface is left following endarterectomy. If this phase of the procedure is lengthy and the patient requires a shunt this clearly increases the risk of cerebral hypoperfusion. If patients requiring a shunt are excluded from research or quality control analysis then an important subgroup of patients (such as those with high-grade stenoses or highly inflamed plaques) may be unintentionally missed.

Shunting is possible during plaque dissection by making a second arteriotomy at the distal extent of the plaque within the ICA after the adventitia is divided with Pott's scissors. This allows the shunt to be placed prior to plaque removal, which can be carried out in a controlled, careful fashion. Figure 1 illustrates

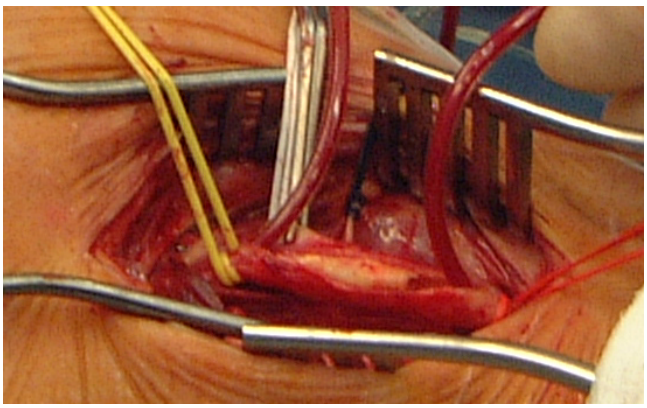

Fig. 1. Proximal and distal arteriotomy to allow shunt placement without damaging the endarterectomy specimen.

the carotid bifurcation, with the adventitia divided over an endarterectomy specimen. A distal arteriotomy has been fashioned and a Pruitt–Inahara shunt is shown in place. The flexibility of this shunt prevents interference during the endarterectomy process. We have experienced no difficulties arising from intimal flap formation at the distal end using this technique.

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No reply received